

SYLLABUS OF THE EDUCATIONAL COMPONENT



MEDICINAL PLANTS IN VETERINARY MEDICINE

specialty	211 Veterinary medicine	mandatory discipline	selective
educational program	Veterinary medicine	faculty	of veterinary medicine
educational level	Not limited	Department	pharmacology and parasitology

TEACHER

Ladohubets Olena Vasyliевна



Higher education - specialty biologist

Scientific degree - candidate of biological sciences 03.00.13 Human and animal physiology

Academic title - associate professor of the department of pharmacology and parasitology

Work experience - 20 years

Indicators of professional activity on the subject of the course:

- author of more than 7 methodological developments;
- author and co-author of more than 120 scientific works, including articles indexed in Web of Science scientometric databases – 5,
- scientific-practical and methodical recommendations – 7,
- educational and methodological manuals – 4, GSTU – 2.

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The following are involved in the teaching of the discipline: associate professor, candidate of medicine. Sciences Duchenko Kateryna Andriivna.

GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT (DISCIPLINE)

Goal	formation of students' competences in the assimilation of the diversity of wild and cultivated representatives of the flora of Ukraine as medicinal products of natural origin used in veterinary practice
Format	lectures, practical classes, independent work, individual tasks
Detailing of learning results and forms of their control	<ul style="list-style-type: none"> • Ability to search and process information from professional sources regarding the use of medicinal plant raw materials for the manufacture of medicinal forms for the treatment and prevention of animal diseases (GC1, GC2, PLO10) / individual tasks for analysis • • Ability to treat and prevent animal diseases using medicinal forms made from plant raw materials (GC2, GC3, PLO1, PLO15) / individual practical tasks • • Ability to understand the importance and necessity of carrying out treatment and preventive measures using medicinal forms from plant raw materials (GC2, GC3, SC7, PLO15, PLO20) / individual situational tasks • The ability to organize, conduct and analyze the results of special laboratory studies with the appropriate registration of their results (GC2, GC3, SC2, PLO7) / individual tasks for analysis • • Ability to timely and effectively develop and implement measures for the use of medicinal plant raw materials (GC2, GC3, GC8, PLO10, PLO20) / individual practical tasks
Scope and forms of control	3 ECTS credits (120 hours): 12 hours of lectures, 18 hours of laboratory classes; 60 hours of independent work, modular control (2 modules); final control - differentiated assessment.
Requirements of the teacher	timely completion of tasks, activity, teamwork
Enrollment conditions	after mastering the following components: (list)...." or "free enrollment"

COMPLEMENTS THE STANDARD OF EDUCATION AND THE EDUCATIONAL PROGRAM

Competences	<p>GC 1. Ability to abstract thinking, analysis and synthesis.</p> <p>GC 2. Ability to apply knowledge in practical situations.</p> <p>GC 3. Knowledge and understanding of the subject field and profession.</p> <p>GC 8. Ability to learn and master modern knowledge.</p> <p>SC 2. The ability to use tools, special devices, devices, laboratory equipment and other technical means to carry out the necessary manipulations during professional activities</p> <p>SC 7. Ability to organize and conduct laboratory and special diagnostic studies and analyze their results.</p>	Program learning outcomes	<p>PLO 1. Know and correctly use the terminology of veterinary medicine.</p> <p>PLO 10. To propose and use expedient innovative methods and approaches to solving problematic situations of professional origin.</p> <p>PLO 15. Know the rules of storage of various pharmaceuticals and biological preparations, ways of their enteral or parenteral use, understand the mechanism of their action, interaction and complex action on the animal body.</p> <p>PLO 20. To have specialized software tools for performing professional tasks.</p>
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STRUCTURE OF THE EDUCATIONAL COMPONENT (DISCIPLINES)

Module 1. General pharmacognosy

Lecture 1.	Introduction to the discipline Medicinal plants in veterinary medicine.	Practical classes (PC 1)	Medicinal plants (MP) and medicinal plant raw materials (MPRM). Medicinal forms prepared from LRS, the technology of their preparation.	Independent work	History of the study of medicinal plants. The meaning of the Red Book. The role of LR introduction and examples.
Lecture 2.	Biologically active substances of medicinal plants: alkaloids, glycosides.				
Lecture 3.	Biologically active substances of medicinal plants: terpenoids, flavonoids, tannins, coumarins, chromones, xanthonones, essential oils, resins and balms, antibiotic substances, hormone-like substances, polysaccharides, fats, bitterness, vitamins, organic acids, trace elements.	PC 2	Determining the reliability of MPRM.		
		PC 3	Biologically active substances of medicinal plants.		

Module 2. Pharmacological effect and use of medicinal plants in veterinary medicine

Lecture 4.	Medicinal plants containing polysaccharides, fats and fatty substances, vitamins, enzymes and phytohormones, glycosides, phenolic compounds and their glycosides, coumarins, chromones, lignans, flavonoids, xanthonones, quinones, tannins (tannins).	PC 4	Medicinal plants that act on the central nervous system and affect the work of the heart.	Independent work	Application in practice and prospects of use in veterinary medicine of medicines from medicinal plant raw materials. Peculiarities of the clinical manifestation and course of poisoning by certain types of plants.
		PC 5	Medicinal plants used for stomach and intestinal ulcer diseases, which have choleric properties and contain bitters.		
Lecture 5	Medicinal plants containing isoprenoids and essential oils, steroids, cardiosteroids and alkaloids.	PC 6	Medicinal plants that have emetic, ruminative, expectorant properties and a laxative effect.		
		PC 7	Medicinal plants that have a firming and astringent hemostatic property and tone the uterus.		
Lecture 6	Medicinal plants containing different groups of biologically active substances.	PC 8	Medicinal plants with diuretic and antiparasitic effects.		
		PC 9	Medicinal plants that have an anti-inflammatory and tonic effect.		

BASIC LITERATURE AND METHODOLOGICAL MATERIALS

literature	RECOMMENDED BOOKS		Methodical support
	Basic literature		
	1.	Andrew Chevallier Encyclopedia Of Herbal Medicine: Durlina, 2023.- 360 p.	
	2.	Handbook of Medicinal Plants : A Complete Source Book/Narayan Das Prajapati; S S Purohit; Arun K Sharma and Tarun Kumar.: Agrobios, 2021,-554 P.	
	3.	Veterinary herbal medicine / [edited by] Susan G. Wynn, Barbara J.Fougère.:Mosby Inc.,2017.- 714 c.	
Additional literature			
4.	Handbook of Medicinal Plants/ [edited by] Zohara Yaniv, Uriel Bachrach.:Routledge.,2008.-526 p		
5.	Pharmacognosy /[edited by Simona Badal.: Elsevier Inc., 2017 .- 716 p.		

EVALUATION SYSTEM ([electronic link to regulations](#))

	SYSTEM	POINTS	ACTIVITY TO BE EVALUATED
Final assessment	100 point ECTS (standard)	up to 50	50% of the average grade for the modules
		up to 50	final testing
Modular assessment	100 points total	up to 50	answers to test questions
		up to 20	oral answers in laboratory-practical classes
		up to 30	the result of mastering the block of independent work

NORMS OF ACADEMIC ETHICS AND CHARITY

All participants in the educational process (including those seeking education) must adhere to the code of academic integrity and the requirements set forth in the provision "On academic integrity of participants in the educational process of DBTU": show discipline, education, respect each other's dignity, show kindness, honesty, responsibility.